PROPOSAL EVALUATION

Proposition 84 Integrated Regional Water Management (IRWM) Grant Program Implementation Grant, Round 1, FY 2010-2011

Applicant	South Tahoe Public Utility District	Amount Requested	\$5,744,944
Proposal Title	Tahoe Sierra IRWMP	Total Proposal Cost	\$11,743,150

PROPOSAL SUMMARY

Ten projects are included in the proposal: (1) Tahoe Resource Conservation District (TRCD) Community Watershed Planning, (2) Town of Truckee Water Quality Monitoring, (3) Sierra County Little Truckee River Restoration Project (Bridge replacement), (4) Truckee River Watershed Council Negro Canyon Restoration, (5) Tahoe Sierra Regional Water Conservation Program, (6) Squaw Valley Public Utility District (PUD) Olympic Valley Creek Aquifer Study, (7) Bijou Creek Environmental Improvement Program, (8) El Dorado County Montgomery Estates Erosion Control Project, (9) Placer County Griff Creek Restoration (Water Quality Improvements), and (10) Tahoe City PUD Bunker Water Tank Replacement.

PROPOSAL SCORE

Criteria	Score/ Points Possible	Criteria	Score/ Points Possible
Work Plan	9/15	Economic Analysis – Water Supply Costs and Benefits	6/15
Budget	2/5	Water Quality and Other Expected Benefits	9/15
Schedule	2/5	Economic Analysis – Flood Damage Reduction	3/15
Monitoring, Assessment, and Performance Measures	3/5	Program Preferences	8/10
Total Score (max. possible = 85)			42

EVALUATION SUMMARY

The following is a review summary of the proposal.

Work Plan

The Proposal does not fully address the criterion and documentation or rationales are incomplete or insufficient. There are discrepancies between the goals and objectives cited in the individual projects and the introduction section, and it is unclear how they relate to the adopted IRWM Plan. Most of the project tasks have adequate detail, although Project 2 and Project 3 have sub-task that provide only the title of the task, such as Mobilization, Site Preparation, and Construction. Project 2 does not address if permits other that California Environmental Quality Act (CEQA) are required and Project 7 has the exact same language in the Environmental Documents and Permits section. Several of the projects cite specific pages of other documents as scientific or technical support, which are not included with the application. While there is no

requirement to submit all reference documents, it is more effective to either include the excerpt as part of the application or briefly summarize in the text what information is being drawn from the referenced document.

Budget

The budgets for most of the projects have detailed cost information, but supporting documentation is lacking for a majority of the items. The applicant does not provide budgets that correlate with the tasks shown in the work plan for eight of the ten of the projects (1, 2, 4, 5, 7, 8, 9, and 10). Project budgets 1, 3,4,7,8, and 9 do not provide any costs for Project Administration. The budgets for Projects 2 and 10 list the budgets by subtasks without any documentation or supporting information to substantiate the basis of estimate.

Schedule

The schedule is not entirely consistent and reasonable. The project schedules have their own numbering systems that don't coincide with tasks in the work plan. Many of the submittal dates do not seem reasonable, with either the start date occurring after the end date (Project 2, task 2.2, Project 3, tasks 3.13 and 3.14, Project 4 task 4.4, Project 7, task 2.1), or the submittal due well before the task is complete (Project 3, tasks 3.6 and 3.7, Project 6, task 6.6, Project 7, task 1.5, Project 9, tasks 9.6 and 9.7).

Monitoring, Assessment, and Performance Measures

The criterion is less than fully addressed, and documentation and rationale are insufficient. The proposal does not address consistency with the Basin Plan, and many of the targets are not quantitative. Not all of the measurement tools and methods correlated with the targets. An example, Project 3, Table 3, lists the measurement tool as "visual observation" where the targets are reduction of downcutting of stream bed and indication of recharge. The measurement tool provided in Table 2, "Volunteers will be enlisted, public tours will be held and the local schools will be encouraged to create a curriculum surrounding the stream recovery project" does not seem rational. Project 5 lacks documentation to verify target feasibility. Project 9 has targets extending out 10 -20 years and four of the ten projects were studies, which do not provide good targets because they are not implementing anything.

Economic Analysis – Water Supply Costs and Benefits

Only low levels of water supply benefits relative to costs can be realized through this proposal, as demonstrated by the analysis and supporting documentation. Quality of the analysis and description of benefits is highly variable across projects. Reviewer noted some omissions in the descriptions and significant problems in the quantification.

Three projects include water supply benefits. Project 5 cost is \$0.54 million (M) in present value (PV). Quantified benefits are shown as \$0.37 M in PV. The savings in gallons per unit are referenced to existing studies and guidelines and appear justified for full-time residences, but not clear that they apply to the higher proportion of second homes within the service area. Savings per gallon is based on the avoided cost of providing treated water, which is escalated for inflation rather than kept in 2009 \$ values.

Project 6 cost is \$0.36 M in PV, shown as a one-time capital cost. The project description in the work plan provides a reasonable description of potential benefits (all contingent on the study's findings and recommendations actually being implemented). Quantified benefits are shown as over \$500 M in PV. The values are not explained, and do not appear to be benefits to the State of California. Categories are

property tax benefits (not a benefit, but a transfer of income); regional increase in visitor expenditures (speculative, and in any case raw expenditures are not a measure of benefits); and something called "regional increase in TOT" which is not explained in Attachment 7.

Project 10 cost is \$2.17 M in PV, shown as a one-time capital cost.

Adequate description is provided of the water supply benefits of the project. Reference to Table 12 is made in the text but reviewer sees no Table 12, nor are quantified benefits shown in Attachment 10.

Economic Analysis - Water Quality and Other Expected Benefits

Above average levels of water quality and other benefits relative to costs can be realized through this proposal; however, the quality of the analysis is moderate and supporting documentation is partially unsubstantiated. Water quality benefits are described but are quantified for only one project (and those are not well explained). Descriptions of benefits vary from poor to good, depending on the project.

Project 1 PV of cost is \$0.45 M, shown as a one-time cost. Proposal describes benefits to water quality from reduced pollutant and sediment loads from treated lands. The No-Project condition is claimed to be no BMP implementation on these lands – this claim is not well supported, and reviewer believes that BMPs would be implemented, but perhaps less effectively and over a longer time horizon.

Project 2 PV of cost is \$0.78 M, shown as a one-time expenditure, when the expenditure may more realistically be an annual monitoring cost. Description is provided of unquantified benefits of implementing the adopted WQMP. The town is under regional board order to implement, so it is unclear what the nofunding condition really would be.

Project 4 costs are \$0.49 M in PV. No description of benefits is provided. A table of benefits in Attachment 8 shows PV of water quality and ecosystem benefits equal to \$0.167 million. None of the dollar values are explained.

Project 7 cost is \$3.04 M in PV, shown as a one-time capital cost. Description provided of the water quality benefits of the project. No benefits are quantified.

Project 8 cost is \$0.50 M in PV, shown as a one-time capital cost. Good description is provided of the water quality benefits of the project. None are quantified.

Project 9 cost is \$1.35 M in PV, shown as a one-time capital cost. Good description is provided of the water quality benefits of the project. Other benefits could include groundwater recharge and fishery spawning improvement. No benefits are quantified.

Economic Analysis – Flood Damage Reduction (FDR)

Only low levels of flood damage reduction (FDR) benefits relative to costs can be realized through this proposal, as demonstrated by the analysis and supporting documentation. The economic benefit values that are used are not well supported. Reviewer attempted to replicate the expected annual damages (EAD) and PV of benefits using Flood Rapid Analysis Model (FRAM), but was unable to do so due to insufficient information.

Only one project claimed FDR benefits. Project 3 total cost is \$2.01 M in PV according to budget summary. Cost table is provided in Attachment 7 rather than 9. Capital costs in Table 11 do not match those in the Attachment 4 budget. In Attachment 9, benefit tables are included but virtually no explanation or rationale

for the benefits claimed. Insufficient information is provided for the reviewer to verify the calculated FDR benefit.

Program Preferences

The proposal includes projects that implement multiple program preferences, demonstrates with a significant degree of certainty that the program preferences claimed can be achieved. However, none of the projects address critical water supply or water quality need of a disadvantaged community. The proposal thoroughly documents the breadth and magnitude of the following program preferences: Effectively integrate water management programs and projects within a hydrologic region, Use and reuse water more efficiently, Expand environmental stewardship, and Practice integrated flood management.